

Contents of Applied Physics B52

This listing presents the papers in alphabetical order of the first author. The Author Index that follows covers **Applied Physics A** and **B**, and is presented in tabular form. The names are listed in alphabetical order in the first column. The second and third columns contain the bibliographic data necessary to locate the paper. The issue is specified by the number separated from the volume number by a slash. The PACS numbers given in the fourth column may be used in conjunction with the PACS listing on the left to infer the topic of a paper.

Photophysics and Laser Chemistry

- Bagayev S.N., Chebotayev V.P., Dmitriyev A.K., Om A.E., Nekrasov Yu.V., Skvortsov B.N.:
Second-order Doppler-free spectroscopy.
Appl. Phys. B 52/1, 63-66 (1991) PACS: 07.65 42.65 42.72
- Barth H.-D., Huisken F., Ilyukhin A.A.:
Coherent Raman spectroscopy of nitrogen molecules and clusters in supersonic jets.
Appl. Phys. B 52/2, 84-89 (1991) PACS: 36.40 42.65 47.40
- Beaudoin Y., Golub I., Chin S.L.:
Measurement of the nonlinear refractive index of SF₆ with a hollow prism.
Appl. Phys. B 52/3, 191-194 (1991) PACS: 35.20M 33.80 42.65 42.60
- Bittner J., Lawitzky A., Meier U., Kohse-Höinghaus K.:
Nitrogen atom detection on low-pressure flames by two-photon laser-excited fluorescence.
Appl. Phys. B 52/2, 108-116 (1991) PACS: 82.40P 33.50
- Borsutzky A., Brüngrer R., Huang Ch., Wallenstein R.:
Harmonic and sum-frequency generation of pulsed laser radiation in BBO, LBO and KD*P.
Appl. Phys. B 52/1, 55-62 (1991) PACS: 42.70 42.65
- Borsutzky A., Brüngrer R., Wallenstein R.:
Tunable UV radiation at short wavelengths (188-240nm) generated by sum-frequency mixing in lithium borate.
Appl. Phys. B 52/6, 380-384 (1991) PACS: 42.70 42.65
- Botma H., Peters P.J.M., Witteman W.J.:
Intrinsic efficiency and critical power deposition in the e-beam sustained Ar/Xe laser.
Appl. Phys. B 52/4, 277-280 (1991) PACS: 42.55F 41.80 52.80
- Capolla N., Lessard R.A., Carré C., Lounnot D.J.:
Studies of the photoreduction of methylene blue in gelatin solutions and films in view of improving the holographic recording process at 633 nm.
Appl. Phys. B 52/5, 326-330 (1991) PACS: 42.70G 82.50
- Carelli G., Ioli N., Messina A.M., Moretti A., Strumia F., Zerbetto S.:
New far-infrared laser lines from ¹³CH₂F₂ and frequency measurements.
Appl. Phys. B 52/1, 32-35 (1991) PACS: 42.55
- Chebotayev V.P., Ulybin V.A.:
Synchronization of Raman transitions in highly excited hydrogen atoms: A new proposal for measuring the Rydberg constant.
Appl. Phys. B 52/5, 347-351 (1991) PACS: 32.80R 06.20
- Cronberg H., Reichling M., Broberg E., Nielsen H.B., Matthias E., Tolk N.:
Effects of inverse Bremsstrahlung in laser-induced plasmas from a graphite surface.
Appl. Phys. B 52/3, 155-157 (1991) PACS: 79.20D
- Csillag L., Jánosy M., Rózsa K.:
Linewidth studies on the KR⁺ 469.4 nm and 473.9 nm lines excited in a helium-krypton hollow cathode discharge.
Appl. Phys. B 52/2, 90-95 (1991) PACS: 32.70J 52.20
- Datsyuk V.V., Izmailov L.A., Kochelap V.A.:
Investigation of vibrational relaxation of excimers: Quantum yield of UV emission and amplification of far-infrared radiation.
Appl. Phys. B 52/1, 22-26 (1991) PACS: 42.55
- Dinev S.G., Hadjichristov G.B., Marazov O.:
Amplified stimulated emission in the NaK(D→X) band by high power copper vapor laser pumping.
Appl. Phys. B 52/4, 290-294 (1991) PACS: 42.55H 33.50
- Encinas Sanz F., Guerra Perez J.M.:
A high-power high-energy pure N₂ laser in the first and second positive systems.
Appl. Phys. B 52/1, 42-45 (1991) PACS: 42.55E 42.60
- Fantoni R., Bijnen F., Djurić N., Piccirillo S.:
Resonance CARS detection of SiC₂ as reaction intermediate in IR laser synthesis of SiC from SiH₄/hydrocarbon mixtures.
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- FEI H., ZHANG Y., HAN L., ZHAO F., WEI Z.:
Raman-enhanced nondegenerate four-wave mixing.
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- Forbes S.J., Kuehn T.H.:
Fraunhofer holography of small particles. A complete solution of the reconstructed image.
Appl. Phys. B 52/4, 305-310 (1991) PACS: 42.40 42.30 06.30
- Frenz M., Mischler Ch., Romano V., Forrer M., Müller O.M., Weber H.P.:
Effect of mechanical tissue properties on thermal damage in skin after IR-laser ablation.
Appl. Phys. B 52/4, 251-258 (1991) PACS: 61.80B 87.45 87.69
- Frisoli J.K., Hefetz Y., Deutsch T.F.:
Time-resolved UV absorption of polyimide. Implications for laser ablation.
Appl. Phys. B 52/3, 168-172 (1991) PACS: 78.47
- Gagné M.C., Chin S.L.:
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Generation of excimer emission in dielectric barrier discharges.
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The decomposition of ethylene by pulsed CO₂ laser radiation at pressures from 500 to 3000 Torr and the use of the 2 C₂H₄ = cyclobutane equilibrium as an internal thermometer.
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Direct observation of the anomalous Zeeman effect at the X→B transition of molecular iodine by the method of nonlinear laser spectroscopy.
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- Hergenröder R., Niemax K.:
Continuous wave field ionization laser spectroscopy.
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Low pressure gain measurements in KrF.
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Stimulated Raman pumping to H₂ (v*=1, J*=1) and resonance-enhanced multiphoton ionization from it using a single laser.
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Infrared laser Stark shift spectroscopy in ammonia. Theoretical and experimental analysis for sensing electric field-strength.
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Broadly tunable near-infrared six-wave mixing processes in potassium vapor.
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Study of VUV radiation of an argon-plasma generated near ceramic surfaces at pressures below 0.1 MPa.
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Competition between subharmonic and signal beams for photorefractive gain in BSO with two pump beams.
Appl. Phys. B 52/3, 173-175 (1991) PACS: 2.65
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Efficiently generated rotational and vibrational stimulated Raman emission by means of two-color laser beam.
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Optical bistability in the semilinear phase-conjugate mirror.
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Spectral line competition in a coaxial electron-beam-pumped high pressure Ar/Xe laser.
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Kinetic study of a short-pulse electron-beam pumped Kr/F₂ laser amplifier medium at very low pressure operation.
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On the excitation mechanism of the He-Ar hollow cathode laser.
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Generation of powerful one-picosecond dye laser pulses at two independently tunable wavelengths.
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- Odoulou S., Sturman B., Holtmann L., Krätzig E.:
Nonlinear scattering in BaTiO₃ induced by two orthogonally polarized waves.
Appl. Phys. B 52/5, 317-322 (1991) PACS: 42.20 42.70 78.20
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Spatiotemporal instabilities from a transversely excited atmospheric CO₂ laser.
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Diagnostics of a compact discharge-pumped XeCl laser with BCl₃ halogen donor.
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The role of the longitudinal component of the electric field vector in two-wave mixing in photorefractive BaTiO₃.
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Saturated 2D-LIF of OH and 2D determination of effective collisional lifetimes in atmospheric pressure flames.
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On the transport of activated particles by flow and diffusion.
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Performance studies of a novel design atmospheric pressure pulsed HF/DF laser.
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Enrichment of ¹³C by IRMPD of CBr₃F₃.
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Efficient second-harmonic generation in Ti₃AsSe₃ using focussed CO₂ laser radiation.
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Two-dimensional coherent detection imaging in multiple scattering media based on the directional resolution capability of the optical heterodyne method.
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Calculation of the signal time-profile in transient CARS experiments.
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